

Decision 05-03-003 March 17, 2005

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of California Water Service Company (U60W), a Corporation, for an Order Authorizing in its East Los Angeles District Operation of Wells below the Source Removal Level for 1,4 Dioxane or a Water Quality Memorandum Account.

Application 04-07-035
(Filed July 21, 2004)

Thomas Smegal, and Lynne McGhee, Attorney at Law,
for California Water Service Company, applicant.

OPINION AUTHORIZING WELL OPERATION

Summary

This decision finds it reasonable for California Water Service Company (CalWater) to continue to operate wells in the East Los Angeles District when those wells test above the Department of Health Services (DHS) Drinking Water Notification Level for 1,4 Dioxane but below the DHS recommended Response Level. This proceeding is closed.

Background

CalWater provides public utility water service to approximately 26,000 customers in its East Los Angeles District (Los Angeles County), encompassing portions of East Los Angeles and the cities of Commerce, Montebello, and Vernon. In July 2004, CalWater received water quality test results confirming the presence of 1,4 Dioxane at levels exceeding the DHS Notification Level in

samples from six of its 10 active wells and one of two inactive wells serving the District.

A manmade compound, 1,4 Dioxane is used primarily as an industrial solvent or solvent stabilizer. The federal Environmental Protection Agency (EPA) considers it to be a human carcinogen. Although no maximum contaminant level (MCL) has been established for 1,4 Dioxane, DHS has set a Notification Level for it at 3ppb (parts per billion). For carcinogens such as 1,4 Dioxane, DHS considers the Notification Level to pose *de minimis* risk, i.e., a theoretical lifetime risk of up to one excess case of cancer in a population of one million people. DHS recommends the source be taken out of service when a carcinogenic contaminant is detected at or above the Response Level, which for carcinogenic contaminants it defines as 100 times the Notification Level. For 1,4 Dioxane, that Response Level is 300ppb.¹

CalWater seeks a Commission order finding it reasonable to continue to operate those East Los Angeles District wells with 1,4 Dioxane concentrations above the Notification Level but below the Response Level and authorizing it to do so. In the alternative, it requests authorization to establish a memorandum account to record and preserve for future recovery its expenses associated with providing water that does not exceed the Notification Level.

The Commission preliminarily determined this to be a ratesetting proceeding expected to require hearing, and the category and need for hearing

¹ Application (A.) 04-07-035 and most of the record in this proceeding refer to “Action Level” and “removal of source level.” With the enactment of Assembly Bill 2528 revising Health and Safety Code Section 116455 effective January 1, 2005 (Chapter 679, Statutes of 2004), those terms have been revised: “Action Level” has now become “Notification Level,” and “removal of source level” has now become “Response Level.” (Exhibit 3, and Exhibit 4, page 3).

were confirmed by the Assigned Commissioner's Scoping Memo.² Although there were no protests, no parties other than applicant Cal Water, and no known opposition to granting the application, the assigned Administrative Law Judge (ALJ) determined that additional and updated evidence would be needed before he could recommend a proposed decision to the Commission. At the prehearing conference, the ALJ directed CalWater to prepare and serve additional testimony addressing his concerns. CalWater did so. The ALJ held one-half day of evidentiary hearing on October 29, 2004, after which the matter was submitted without briefs.

Discussion

In response to lawsuits filed in superior court against several regulated utilities alleging that they provided unsafe drinking water, the Commission in 1998 initiated an investigation into drinking water quality issues.³ Through a series of decisions in that proceeding, the Commission examined and explained its authority to regulate the health and safety of drinking water provided by the water utilities it regulates.⁴ The plaintiffs' cases against the water utilities and others eventually reached the California Supreme Court, and the court there

² Resolution ALJ 176-3176 (August 19, 2004), and Scoping Memo and Ruling of Assigned Commissioner dated September 9, 2004.

³ Order Instituting Investigation (I.) 98-03-013, Investigation on the Commission's Own Motion into Whether Existing Standards and Policies of the Commission regarding Drinking Water Quality Adequately Protect the Public Health and Safety with respect to Contaminants, etc.

⁴ See Decision (D.) 99-06-054 (Interim Opinion Denying Motions Challenging Jurisdiction to Conduct Investigation 98-03-013) as corrected by D.99-07-004; D.99-09-073 modifying D.99-06-054 and denying rehearing; and D.00-11-014 (Final Opinion Resolving Substantive Water Quality Issues).

further elaborated on the extent of the Commission's jurisdiction.⁵ The Commission and court's decisions in I.98-03-013 and *Hartwell* explain the basis and extent of our jurisdiction to address the water contamination issue CalWater brings to us in this proceeding and we need not repeat those explanations here.

Our requirement for utility compliance with water quality standards is expressed in General Order (GO) 103:

Any utility supplying water for human consumption ... shall comply with the laws and regulations of the state or local Department of Health Services.... A compliance by a utility with the regulations of the State Department of Health Services on a particular subject matter shall constitute a compliance with such of these rules as relate to the same subject matter except as otherwise ordered by the Commission. (GO 103, Section II.1.a.)

The Commission exercises concurrent jurisdiction with DHS over the quality of drinking water provided by the regulated water utilities, and has used DHS standards in its regulatory proceedings as an integral part of its program of regulating water utilities for many years.

When a drinking water contaminant is discovered for which there is no primary or secondary standard, DHS develops a Notification Level for it. 1,4 Dioxane is not part of any EPA or DHS compliance regulations and has not been routinely tested for in the past, but DHS has developed a Notification Level for it of 3ppb and a Response Level of 300ppb. State law requires that Commission-regulated water providers notify local government and (effective January 1, 2005) the Commission when a contaminant exceeds an MCL, a

⁵ *Hartwell Corp. v. Superior Court* (2002) 27 Cal.4th, 256.

Notification Level, or a Response Level established by DHS.⁶ The Commission may then order further actions not inconsistent with DHS' standards and regulations.

CalWater has properly made those notifications. In the case of the local agencies, the evidentiary hearing record shows that CalWater notified the local agencies (County of Los Angeles and the cities of Commerce, Montebello, and Vernon) by letters within 30 days after contamination was first known in July 2004.⁷ CalWater notified the Commission by filing this A.04-07-035 on July 21, 2004. We now consider what action we should take in response. To do that, we must consider the public interest in two aspects of water service: receiving clean, healthful water, and receiving water at reasonable rates.

CalWater presented two employee witnesses at the evidentiary hearings to testify on the regulatory and public health implications of 1,4 Dioxane at the levels CalWater has detected, the potential costs of treating or replacing affected water supplies, and the rate effects each alternative could have on CalWater's East Los Angeles District customers.

CalWater's first expert witness was Chet W. Auckly, its Director of Water Quality and Environmental Affairs responsible for testing and compliance with all federal and state drinking water standards in CalWater's operating districts.

⁶ Health & Safety Code § 116455. Notification to the local agency and the Commission "... (a) shall identify the drinking water source, the origin of the contaminant, if known, the maximum contaminant level, response level, or notification level, as appropriate, the concentration of the detected contaminant, and the operational status of the drinking water source, and shall provide a brief and plainly worded statement of health concerns."

⁷ Letters dated July 20, 2004 and updated August 11, 2004. (Exhibit 2, Tab D.) None of the local agencies have responded.

Auckly is a Registered Environmental Health Specialist in California. Auckly testified that testing all 10 active and two inactive East Los Angeles District wells detected 1,4 Dioxane levels ranging from 3.1ppb to 10.5ppb in six of the 10 active wells and 3.8ppb in one of the two inactive wells. The two inactive wells were tested because CalWater was planning to reactive them in the near future. As required, CalWater timely notified DHS and local agencies in the affected area. DHS publishes guidelines describing what its Notification Level and Response Level signify, how they are derived, and its recommendations for water providers when contaminants are detected in drinking water supplies.⁸ DHS considers its Notification Levels to be health-based advisory levels and not enforceable standards. However, in addition to the mandatory notification requirements of Health and Safety Code 116455, if a chemical is present over its Notification Level, DHS recommends the water provider: (a) inform its consumers of its presence and the potential for adverse health effects at high levels of exposure; (b) track its continued presence through follow-up sampling at reasonable intervals; and (c) take the water source out of service if the contaminant is present at or above the Response Level. DHS considers each water provider's consumer confidence report sent to customers annually to be an appropriate method for notifying consumers.

CalWater did inform DHS by e-mail that 1,4 Dioxane had been detected, and provided it with copies of the test results and local agency letters. DHS' response was to request CalWater keep it informed of any treatment plans. Auckly testified that DHS made no other recommendation and it considered the

⁸ Exhibit 4, Drinking Water Action Levels, from DHS' World Wide Web site, <http://www.dhs.ca.gov/ps/ddwem/chemicals/AL/actionlevels.htm> (10/28/04).

risk involved low. As a result, CalWater intends in this case to follow the DHS recommendations described above for contaminant concentrations above the Notification Levels but below Response Levels.

CalWater has not removed the affected wells from service because they provide 18% of its production and are needed to supply its East Los Angeles District customers. If the Commission were to determine that it should not continue to serve water with 1,4 Dioxane above the Notification Level, CalWater would either have to find additional sources in the area or treat the affected wells. Various geographic and operational constraints in the district would make it infeasible to use another common technique, blending with other, unaffected sources to reduce 1,4 Dioxane concentrations to below-detectable levels. Moreover, DHS strongly encourages removal treatment over blending. While it might be able to purchase make-up supplies from Metropolitan Water District, Auckly explained that doing so would introduce additional water quality and pressure problems in the system, and would cost about \$3,000 per day. Auckly also testified to the two possible treatment methods, reverse osmosis and ultraviolet-peroxide, that could be used to remove 1,4 Dioxane. Of those, oxidation using ultraviolet light combined with hydrogen peroxide is by far the less expensive. Even so, ultraviolet-peroxide treatment could cost about \$710,000 per facility for about six treatment facilities, plus an annual operating cost of about \$50,000 to \$60,000 per facility. CalWater's second witness, Thomas F. Smegal, was its Manager of Rates and a licensed civil engineer in California. Smegal estimated that the effect on East Los Angeles District customers would be to increase their rates by slightly over \$4 per month per customer.

While it might be possible to recover these costs from those responsible for the groundwater contamination, the source of contamination is not known and no such parties have been identified to date. Smegal testified that CalWater evaluates each incidence of contamination on a case-by-case basis and “will be determining if potentially responsible parties can be identified and if there is a reasonable likelihood for the recovery of damages.” According to Smegal, CalWater also cooperates with state or local agencies that may initiate investigations.

Nowhere in the application or prepared testimony does CalWater make an explicit recommendation to either remove the affected wells from service, or to continue to operate them. When asked by the ALJ at the evidentiary hearing if he could make such a recommendation as a Registered Environmental Health Specialist with a legal and ethical obligation to protect the public health, and CalWater’s foremost expert in the field, Auckly said he could. His recommendation was to continue to operate the wells following the DHS guidelines, and to monitor their 1,4 Dioxane levels. Rather than state an arbitrary concentration between the Notification Level and Response Level at which he would be moved to action, he believed it more important to observe for any upward trend that could indicate increased public health risk, and to act well before any of the affected sources approaches the Response Level.

The Commission has a responsibility to the utilities it regulates to provide safe water supplies at reasonable cost.⁹ We recently evaluated a similar situation involving 23 wells in CalWater’s Bakersfield District and three wells in South San Francisco District. In those wells, a different

⁹ *Hartwell Corp. v. Superior Court* (2002) 27 Cal.4th 256, 273.

contaminant, 1,2,3-Trichloropropane (TCPA) was detected at above the Notification Level but below the Response Level. There, we allowed CalWater to return the affected wells to service and ordered it to comply with all Health and Safety Code requirements and DHS requirements and recommendations relating to water supplies with TCPA levels between those levels.¹⁰ We reach a similar result today.

DHS has set the Notification Level at a 1,4 Dioxane concentration that presents *de minimis* risk, i.e., a theoretical lifetime risk of up to one excess case of cancer in a population of one million people consuming the product over a 70-year lifetime. Higher concentrations are assumed to pose proportionately higher risks. DHS puts this statistical risk into perspective by noting that approximately 250,000 to 300,000 cases of cancer would be anticipated to occur naturally in that population. In those circumstances, DHS recommends notification and monitoring, not removal of the offending sources. We agree. Remediation by either retiring the affected sources and replacing their supply with purchased water or treating the sources to remove the contaminants would entail high costs that would have to be recovered through significant rate increases. Considering the low public health risk 1,4 Dioxane presents at these concentrations, and the high cost of remediation, we will authorize CalWater to continue using the affected sources and order the same ongoing notification and monitoring measures we did in the Bakersfield and South San Francisco District TCPA cases.

¹⁰ D.04-05-060 (May 27, 2004).

We take this opportunity to make one additional observation. In our D.00-11-014, Final Opinion Resolving Substantive Water Quality Issues, we indicated we would consider in a future investigation or rulemaking proceeding whether DHS' Notification Levels, which DHS categorizes as nonmandatory and nonenforceable, should be mandatory for regulated utilities. In this instance, CalWater has given the Commission notice of its above-Notification Level 1,4 Dioxane test results by filing this application and asking the Commission to make a determination. CalWater alone has over 700 wells (of which it considers about 550 active) in California,¹¹ and we expect that California's other Commission-regulated water utilities would raise the statewide numbers to well in excess of 1,000. And, at the time of the evidentiary hearings in this case there were 87 other contaminants for which DHS had established Notification Levels.¹² We do not require, nor do we desire, the regulated water utilities to file applications to satisfy their obligations under Health and Safety Code Section 116455 to notify the Commission of every confirmed detection of a contaminant in excess of an MCL, a Notification Level, or a Response Level. Absent a future indication from the Commission or its staff to the contrary, we prefer the utilities follow DHS' guidelines and use their best judgment in addressing the problem (as CalWater has done here), and that their required notifications be made by letter to the Commission's Executive Director with copies to the directors of the Water Division and Office of Ratepayer Advocates. Those recipients can then advise if they believe a formal proceeding is warranted under the specific circumstances. To pursue a formal application proceeding in

¹¹ RT 55.

¹² Exhibit 4, page 1.

every instance is unnecessary and would place an unjustified drain on both utility and Commission resources.

Comments on Proposed Decision

The proposed decision of the principal hearing officer in this matter was mailed to the parties in accordance with Section 311(d) of the Public Utilities Code and Rule 77.1 of the Rules of Practice and Procedure. No comments were received.

Assignment of Proceeding

Geoffrey F. Brown is the Assigned Commissioner and James McVicar is the assigned ALJ in this proceeding.

Findings of Fact

1. No MCL has been established for 1,4 Dioxane in drinking water. DHS has set a Notification Level for it at 3ppb and a Response Level at 300ppb.

2. In July 2004, CalWater received water quality test results confirming the presence of 1,4 Dioxane at levels above the DHS Notification Level but below the DHS Response Level in samples from wells serving East Los Angeles District. 1,4 Dioxane levels ranged from 3.1ppb to 10.5ppb in six of the 10 active wells and were 3.8ppb in one of the two inactive wells.

3. 1,4 Dioxane is not part of any EPA or DHS compliance regulations and has not been routinely tested for in the past.

4. DHS considers 1,4 Dioxane in drinking water to be a carcinogenic contaminant. DHS recommends the drinking water source be taken out of service when a carcinogenic contaminant is detected at or above the Response Level. For concentrations at or above the Notification level but below the Response Level, DHS recommends notification and monitoring, not removal of the offending source.

5. Health and Safety Code Section 116455 requires Commission-regulated water providers to notify local government and (effective January 1, 2005) the Commission when a contaminant exceeds an MCL, a Notification Level, or a Response Level established by DHS.

6. In addition to the mandatory notification requirements of Health and Safety Code Section 116455, if a chemical is present over its Notification Level, DHS recommends the water provider: (a) inform its consumers of its presence and the potential for adverse health effects at high levels of exposure; (b) track its continued presence through follow-up sampling at reasonable intervals; and (c) take the water source out of service if the contaminant is present at or above the Response Level.

7. CalWater represents that it is monitoring for 1,4 Dioxane and has conducted and will continue to conduct follow-up sampling.

8. In this instance, CalWater has properly and timely made all notifications recommended by DHS or required by Health and Safety Code Section 116455.

9. CalWater gave the Commission notice of its above-Notification Level 1,4 Dioxane test results by filing this application.

10. To pursue a formal application proceeding in every instance when a contaminant is found at or above the Notification Level in a water source is unnecessary and would place an unjustified drain on both utility and Commission resources.

11. CalWater had not at the time of hearing removed the affected wells from service because they provide 18% of its production and are needed to supply its East Los Angeles District customers.

12. CalWater might be able to purchase make-up supplies from Metropolitan Water District, but doing so would be costly and introduce additional water quality and pressure problems in the system.

13. If the Commission were to determine that CalWater should not continue to serve water with 1,4 Dioxane present at or above the Notification Level, it would either have to find additional sources in the East Los Angeles District or treat all water from the affected wells.

14. Oxidation using ultraviolet light combined with hydrogen peroxide would be the least expensive treatment method. CalWater's expert witnesses estimated that ultraviolet-peroxide treatment could cost about \$710,000 per facility for about six treatment facilities, plus an annual operating cost of about \$50,000 to \$60,000 per facility, and could increase rates in East Los Angeles District by slightly over \$4 per month per customer.

15. CalWater's expert witness, a Registered Environmental Health Specialist with a legal and ethical obligation to protect the public health, recommended CalWater continue to operate the affected wells following the DHS guidelines, and monitor their 1,4 Dioxane levels.

16. The presence of 1,4 Dioxane in water from wells in the East Los Angeles District at concentrations above the Notification Level but below the Response Level does not pose a significant health risk to people ingesting the water from those wells.

17. Considering the low public health risk 1,4 Dioxane presents at these concentrations, and the high cost of remediation, it is reasonable for CalWater to continue to operate wells in the East Los Angeles District when those wells test above the DHS Notification Level for 1,4 Dioxane but below the DHS recommended Response Level.

18. There is no known opposition to granting the application.

Conclusions of Law

1. The Commission exercises concurrent jurisdiction with DHS over the quality of drinking water provided by the regulated water utilities, and uses DHS standards in its regulatory proceedings as an integral part of its program of regulating water utilities.

2. A water utility's compliance with DHS water quality regulations constitutes compliance with the Commission's rules relating to that subject except as otherwise ordered by the Commission.

3. DHS considers its Notification Levels to be health-based advisory levels and not enforceable standards.

4. The Commission has a responsibility to the utilities it regulates to provide safe water supplies at reasonable cost.

5. The Commission does not require, nor does it desire, the regulated water utilities to file applications to satisfy their obligations under Health and Safety Code Section 116455 to notify the Commission of every confirmed detection of a contaminant in excess of an MCL, a Notification Level, or a Response Level.

6. Water utilities should follow DHS' guidelines and use their best judgment in addressing supply contamination problems. Water supply contamination notifications should be made by letter to the Commission's Executive Director with copies to directors of the Water Division and Office of Ratepayer Advocates.

7. CalWater should be authorized to continue using East Los Angeles District wells with 1,4 Dioxane levels above the DHS recommended Notification Level but below the Response Level.

8. For administrative efficiency, this decision should be made effective immediately.

O R D E R

IT IS ORDERED that:

1. California Water Service Company (CalWater) is authorized to continue to operate wells in the East Los Angeles District when those wells test above the Department of Health Services (DHS) Drinking Water Notification Level for 1,4 Dioxane but below the DHS recommended Response Level.
2. CalWater shall comply with all Health and Safety Code requirements and DHS requirements and recommendations relating to water supplies with 1,4 Dioxane concentrations at or above the DHS Notification Level or Response Level.
3. CalWater shall by means of its annual consumer confidence report notify its customers in the East Los Angeles District that 1,4 Dioxane has been detected in their water supplies at concentrations above Notification Level but below Response Level, and shall explain to them the meanings and health implications of those levels. Notification shall be repeated in subsequent years' consumer confidence reports when 1,4 Dioxane levels have exceeded the DHS Notification Level at any time during the year covered by the report.
4. CalWater's future notifications to the Commission required by Health and Safety Code Section 116455 shall be made by letter to the Commission's Executive Director with copies to the directors of the Water Division and the Office of Ratepayer Advocates.

5. Application 04-07-035 is closed.

This order is effective today.

Dated March 17, 2005, at San Francisco, California.

MICHAEL R. PEEVEY
President
GEOFFREY F. BROWN
SUSAN P. KENNEDY
DIAN M. GRUENEICH
Commissioners